

PATENT ABSTRACTS OF JAPAN

(11)Publication number : **59-020440**

(43)Date of publication of application : **02.02.1984**

(51)Int.Cl.

C22C 9/04

(21)Application number : **57-130071**

(71)Applicant : **mitsubishi metal
corp**

(22)Date of filing :

26.07.1982

(72)Inventor :

**Tabei Kazuhiro
Hatsuka Akifumi**

(54) SHAPE MEMORY COPPER ALLOY

(57)Abstract:

PURPOSE: To obtain the titled alloy consisting of prescribed percentages of Zn, Al, Ti and ≥ 1 kind among Fe, Ni and Co and the balance Cu with inevitable impurities and having superior fatigue rupture resistance and superior ductility, especially martensite phase deformability.

CONSTITUTION: This shape memory Cu alloy consists of, by weight, 10W45% Zn, 1W10% Al, 0.05W3% Ti, 0.05W2% ≥ 1 kind among Fe, Ni and Co, and the balance Cu inevitable impurities. The alloy has high ductility, superior fatigue rupture resistance and superior martensite phase deformability. Electrolytic Cu, electrolytic Zn, high purity Al, pure Ti, a Cu-Fe mother alloy, electrolytic Ni and electrolytic Co are melted as starting materials with a high frequency induction heating furnace, and the molten metal is cast into an ingot. The ingot is hot forged and hot rolled, and the resulting plate is heat-treated by water hardening to obtain the desired shape memory Cu alloy.

LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2000 Japan Patent Office